## DOCUMENT RESUME

ED 104 951 TH 004 409

AUTHOR Littlefield, John H.

TITLE An Investigation of Instructor Accuracy in Predicting

Course-Instructor Ratings by Students.

PUB DATE 3 Apr 75

NOTE 17p.; Paper presented at the Annual Meeting of the

American Educational Research Association

(Washington, D. C., March 30-April 3, 1975). Document not available in hard copy due to marginal legibility

of original document

EDRS PRICE DESCRIPTORS

MF-\$0.76 HC Not Available from EDRS..PLUS POSTAGE Class Size; College Instruction; College Students; \*College Teachers; \*Effective Teaching; \*Participant Satisfaction; \*Prediction; Predictor Variables; Student Teacher Relationship; Teacher Attitudes; Teacher Characteristics; \*Teacher Evaluation; Teacher

Improvement; Teacher Rating; Teaching Methods

#### ABSTRACT

This study investigates the relationship of (1) previous course-instructor rating feedback, (2) class size, and (3) various instructor personal characteristics, with the tendency of college instructors to make large errors in predicting course-instructor ratings by their students. Significant over- and under-predictors were identified for each of four principal components of student response. Previous student rating feedback was not related to making significant errors in prediction. Instructor content area was related to predictive errors regarding instructor-student interactions. Instructor age and teaching experience were related to significant over-prediction regarding instructor competence and classroom organization. (Author)



## AN INVESTIGATION OF INSTRUCTOR ACCURACY IN PREDICTING

## COURSE-INSTRUCTOR RATINGS BY STUDENTS

John H. Littlefield, Ph.D.

Learning Evaluator

Office of the Assistant Dean for Education

Texas Tech University

Health Sciences Centers

Lubbock, Texas 79409

US OEPARTMENT OF HEALTH,
EOUCATION & WELFARE
NATIONAL INSTITUTE OF
EOUCATION
THIS DOCUMENT HAS BEEN REPRO
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIGIN
ATING IT POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRE
SENT OFFICIAL NATIONAL INSTITUTE OF
EDUCATION POSITION OR POLICY

Paper Presented at the Annual Meeting of the American Educational Research Association Washington, D.C.
April 3, 1975



# AN INVESTIGATION OF INSTRUCTOR ACCURACY IN PREDICTING

## COURSE-INSTRUCTOR RATINGS BY STUDENTS

#### ABSTRACT

This study investigates the relationship of (a) previous course-instructor rating feedback, (b) class size, and (c) various instructor personal characteristics, with the tendency of college instructors to make large errors in predicting course-instructor ratings by their students. Significant over-and under-predictors were identified for each of four principal components of student response. Previous student rating feedback was not related to making significant errors in prediction. Instructor content area was related to predictive errors regarding instructor-student interactions. Instructor age and teaching experience were related to significant over-prediction regarding instructor competence and classroom organization.

#### BACKGROUND

The collection of course-instructor ratings (CIR) by students is a standard practice in many U. S. colleges and universities. One use of this information is to provide formal student feedback to instructors. Eble (1970) notes that CIR results seen only by the instructors provide a widely accepted means of improving teaching. In discussing the effect of student ratings upon teaching skills, Eble states:

The skillful teacher, like the skillful actor, may not need the feedback such questionnaires can provide. He may already possess a keer and constant sense of the relationship between what he is doing and the way students respond. In addition, the teacher has other measures—tests, papers, oral reports—which give him information about the way a course is going. But teachers must acquire teaching skill, and even skilled teachers fall into comfortable routines...(1970, p.34)

In short, Eble suggests that the CIR procedure provides continuing student feedback which can aid an instructor in developing and maintaining his teaching skills by improving the accuracy of his perception of how students respond to his teaching activities.

Recently. several researchers have investigated the feedback effects of course-instructor ratings upon college instructors. Two types of criterion measures have been used as dependent variables: (a) changes between midsemester and end of semester student ratings (Miller, 1971; Braunstein, Klein, and Pachla, 1973; Emmer, McBurnette, & Davis 1974); (b) differences in end of semester ratings between instructors who have received midsemester CIR feedback and a control group which did not receive feedback (Centra 1973a). These criterion measures do not directly assess the effects of student feedback upon the accuracy of instructor perceptions of their students' viewpoints toward the course.



Two previous researchers have considered the relationship between instructor self descriptions and ratings by their students. Webb and Nolan (1955) report a correlation of .62 between student ratings of instructor traits and instructor self ratings. Centra (1973b) found a median correlation of .21 between instructor self ratings and student ratings across 21 CIR items. Three major conclusions can be drawn from Centra's study:

- 1. Instructors generally rated themselves more favorably than their students did.
- 2. The greatest instructor-student disagreement centered on CIR items dealing with teacher-student interactions.
- 3. There were no significant effects for instructor sex or teaching experience on accuracy of prediction. Natural science instructors tended to underestimate the course workload, while education and applied science instructors tended to overestimate the reported workload.

Social perception has been defined as the ability to interpret the viewpoint of others (Tagiuri, 1969). It is operationally defined as the discrepancy between the responses of a subject and a judge's predictions of those responses. Within the context of course-instructor ratings, instructors could predict the mean response of their students on each item of a student rating instrument. If the discrepancy between instructor predictions and actual student ratings is small, the instructor's social perception is considered to be accurate. (Note the difference between instructor self ratings used by Webb and Nolan (1955) and Centra (1973b) and instructor predictions of their student ratings utilized to measure accuracy of social perception.)

Distance scores (D =  $\sqrt{\frac{2}{\Sigma} (X-Y)^2}$ ; where X and Y are judge's predictions i=1

and subject's responses respectively) have traditionally been used as an operational measure of social perception (Dymond, 1949, Gage, 1953; Gage, Rurkel and Chattergee, 1963). Cronbach (1958) provided several methodological criticisms of the distance score as a social perception measure. Two of these criticisms were:

- 1. The squaring procedure "throws out" information regarding the direction of prediction errors.
- The distance score technique sums differences across heterogenous items.

Very few recent researchers have utilized distance scores as a measure of social perception (for exceptions see Daniellian, 1967; and Cline & Richards, 1962). No one has offered a methodological innovation for meeting Cronbach's criticisms of distance scores.

To summarize, previous researchers have not investigated the effects of CIR feedback or other instructor characteristics upon the accuracy of instructor social perception regarding their students' viewpoints. One factor which has undoubtedly limited recent research is the methodological complexity of using distance scores as an operational measure of social perception.



#### METHODOLOGY

Subjects for this study were all instructors in the University of Texas at Austin Colleges of Social and Behavioral Sciences, Humanities, Natural Sciences, and the School of Communication who participated in the Course-Instructor Survey during the 1973 Fall Semester. The sample was limited to instructors teaching in "traditional" classroom settings, namely one teacher and 10 to 49 students. The sample instructors estimated their mean student response for each of 24 items from the Course-Instructor Survey: General Questionnaire prior to receiving the results of their student ratings. Appendix B. contains the data collection instrument.

Data analysis procedures consisted of four separate steps:

- 1. Principal Components Analysis was performed on student mean item responses for all of the sample instructors. Principal components with eigen roots greater than one were extracted and rotated to a Varimax criterion. Principal component scores were computed for each sample instructor.
- 2. Instructor Predictions were computed by applying the principal components weights from step 1 to the individual instructor predictions of their students' mean item responses. A predicted score analogous to the principal component scores in step 1 was computed for each instructor.
- 3. Instructor Predictive Accuracy was measured by subtracting the actual principal component score (based upon student ratings) from the instructors' prediction. This operation can be represented mathematically as follows:

$$PA_{ij} = IP_{ij} - PC_{ij}$$

where PA<sub>ij</sub> represents the predictive accuracy score of instructor "i" on principal component "j", IP is the instructor's prediction for component j, and PC is the instructor's principal component score based upon the responses of his students. Thus PA is a measure of instructor predictive accuracy within each independent dimension of the CIR instrument. A significant error in predictive accuracy is defined as PA<sub>ij</sub>> $\overline{PA}$  +  $\sigma_{PA}$  (overprediction) or PA<sub>ij</sub><  $\overline{PA}$  -  $\sigma_{PA}$  (underprediction).

4. Chi Square Analysis was performed on the characteristics of instructors who were categorized as over- or under-predictors on such principal component.

The analysis procedures in steps 1 and 2 were designed to counter Cronbach's (1958) criticisms of the distance score technique as a measure of social perception. The choice of  $\overline{PA} \pm \sigma_{pA}$  as the criterion for defining significant predictive inaccuracy was based upon its use by Centra (1973b) Chi Square was chosen as the final analytical procedure because the bipolar nature of social perception (i.e., significant over- or under-prediction) precludes the use of parametric statistics.



The final subject sample consisted of 318 instructors (79% response rate). Data was collected for seven instructor background characteristics: sex, age, faculty rank, college, teaching experience, class size, and previous CIR experience. Appendix D provides a detailed breakdown of instructor background characteristics.

A principal components analysis and varimax rotation (Veldman, 1967) was performed on the mean student responses for 22 items from the Course-Instructor Survey: General Questionnaire (Appendix A). Items 27 and 29 were omitted due to the large proportion of instructors who failed to predict cheir student ratings. Four principal components which accounted for 73.7% of the original variance were extracted. Analysis of the CIR items which loaded heavily on each component resulted in the following names:

- (a) Component I (eigen root = 11.13): Student-Instructor Interactions
- (b) Component II (eigen root = 2.52): Student Expectations
- (c) Component III (eigen root = 1.24): Instructor Competence
- (d) Component IV (eigen root = 1.31): Classroom Organization

Appendix C provides the General Questionnaire items which loaded .40 or higher on each principal component.

The summary results of the Chi Square Analysis are outlined in Table I below:

Table I
Summary of the Chi Square Tests

	l	Over-Predictors		<u> </u>	Under-Predictors			
<del>_</del>	Comp I	Comp II	Comp III	Comp IV	Comp I	Comp II	Comp 1:I	Comp IV
Class Size (df=2)	กร	p < .001	ns	ns	ne		กร	ns
Instructor Sex (df=1)	ns	p < .01	ns	กร	กร		ns	กร
Instructor Tenure (df-1)	ns	p = .05	p < .05	p < .01	กร		ns	p < .01
Instructor Age (df=3)	กร	p < 05	p < .001	p < .01	กฮ		en	p < .05
Instructor Teaching Experience (df-2)	ne	กร	p < .01	p < .01	กร		en	p < .01
Instructor Previous CIR Feedback (df=2)	ns	กฮ	ពន	p < .01	กอ		กอ	p < .05
Instructor Content Area (df=3)	p < .01	p < .0001	p < .01	กร	p < .01		ពខ	p < .01

Note that no Chi Square tests are reported for the under-predictors on Component II (Student Expectations). The distribution of instructor predictive accuracy scores for Student Expectations was skewed to an extent that no instructors were more than one standard deviation below the mean.



Summary interpretations of the significant Chi Square tests are presented in Table 2 below. A more detailed presentation of expected and observed frequencies is available upon request.

#### Table 2

Significant Chi Square Tests for each Principal Component

- 1. Component I: Instructor-Student Interactions
  - a. Over-predictors: instructors in the College of Natural Sciences
  - b. Under-predictors: instructors in Humanities and in the School of Communication
- 2. Component II: Student Expectations
  - a. Over-predictors: instructors in classes with 10-20 students

female instructors nontenured instructors

instructors who are 20-25 years old instructors in the College of Humanities

- 3. Component III: Instructor Competence
  - a. Over-predictors: nontenured instructors

instructors over age 30

instructors with more than 6 years teaching

experience

instructors in the School of Communication

- 4. Component IV: Classroom Organization
  - a. Over-predictors: tenured instructors

instructors over age 30

instructors with more than 6 years teaching

experience

instructors with more than 6 courses previously

rated by students

b. Under-predictors: nontenured instructors

instructors under 30 years old

instructors with less than 2 years teaching

experience

instructors with less than 6 courses previously

rated by students



#### DISCUSSION

The overprediction on Component I by instructors in the College of Natural Science complements the findings of Centra (1973b) regarding a tendency for Natural Scientists to underestimate the course workload. These results suggest a stereotype of the Natural Scientist as an introverted individual who does not actively interact with students (Roe, 1957). The significant underpredictions on Component I by instructors in Humanities and the School of Communication emphasizes the possibility that instructor content area may be a useful predictor of directional errors in predicting the viewpoints of students. However, at this time both of the above interpretations must be accepted as tentative and deserving further study.

The interpretation of the results for Component II (Student Expectations) is complicated by the fact that a large proportion of the Humanities classes taught by young nontenured instructors at the University of Texas are introductory foreign language courses. These courses are traditionally not a favorite among students, therefore one might anticipate low student ratings in terms of their expectations for the courses and consequently a tendency for instructors to over-predict.

The results of identifying over-predictors on Components III and IV are subject to a very interesting interpretation. Both of these components are related to "teaching expertise." In both cases it appears that experienced teachers become over confident regarding student perceptions of their teaching skills. In contrast, inexperienced instructors tended to significantly under-predict their students' responses on Component IV.

Finally, it should be noted that across all four principal components, instructors with no previous CIR feedback experience did not make more significant errors of prediction than did instructors with CIR feedback experience.

### CONCLUSIONS

Two primary conclusions may be drawn from this study. First, a technique for measuring social perception has been demonstrated. This procedure seems to satisfy the methodological criticisms of distance scores as a measure of social perception (Cronbach, 1958).

Second, the results indicate that previous CIR feedback does not reduce the probability of making errors in predicting student responses. On the other hand, instructor content area was related to significant prediction errors regarding Instructor-Student Interactions while teaching experience was directly related to making significant over-predictions regarding "teaching expertise" (Components III and IV). The survey nature of this study requires that results be accepted somewhat tentatively; however, if replicated they offer some definite guidelines to educators interested in developing teaching skills among college faculty members with diverse previous teaching experience and content specialities (Popham, 1974).



#### **BIBLIOGRAPHY**

- Braunstein, D.N., Klein, G.A., & Pachla, M. Feedback expectancy and shifts in students ratings of college faculty. <u>Journal of Applied Psychology</u>, 1973, <u>58</u>, 254-258.
- Centra, J.A. Effectiveness of student feedback in modifying college instruction. <u>Journal of Educational Psychology</u>, 1973, <u>65</u>, 395-401. (a)
- Centra, J.A. Self-ratings of college teachers: A comparison with student ratings. <u>Journal of Educational Measurement</u>, 1973, <u>10</u> 287-295. (b)
- Cline, V.B. & Richards, J.M. Components of accuracy of interpersonal perception scores and the clinical and statistical prediction controversy. Psychological Record, 1962, 13, 373-381.
- Cronbach, L.J. Proposals leading to analytic treatment of social perception scores. In R. Tagiuri & L. Fetrullo (Eds.) Person perception and interpersonal behavior. Stanford University Press, 1958, 353-379.
- Danielian, J. Psychological and methodological evaluation of the components of judging accuracy. <u>Perceptual and Motor Skills</u>, 1967, 24,
- Dymond, R.F. A scale for the measurement of empathic ability. <u>Journal of Consulting Psychology</u>, 1949, 13, 127-133.
- Eble, K.E. The recognition and evaluation of teaching. Salt Lake City, Utah: Project to Improve College Teaching, 1970.
- Emmer, E. T., McBurnette, P., & Davis, O.L. Instructor perception, content of scale and feedback effectiveness. Paper presented at the annual meeting of the American Educational Research Association, Chicago, April 1974.
- Gage, N.L. Accuracy of social perception and effectiveness in interpersonal relationships. Journal of Personality, 1953, 22, 128-141.
- Gage, N.L., Runkel, P.J., & Chatterjee, B.B. Changing teacher behavior through feedback from pupils: An application of equilibrium theory. In W.W. Charters and N.L. Gage (Eds.), Readings in the Social Psychology of Education. Boston: Allyn and Bacon, 1963.
- Miller, M.T. Instructor attitudes toward, and their use of student ratings of teachers. <u>Journal of Educational Psychology</u>, 1971, <u>62</u>, 235-239.
- Popham, W.J. Higher Education's Committment to Instructional Improvement. Educational Researcher, 1974, 3, 11, 11-13.
- Roe, A. Early determinants of vocational choice. <u>Journal of Counseling Psychology</u>, 1957, <u>4</u>, 212-217.



## BIBLIOGRAPHY (cont.)

- Tagiuri, R. Person perception. In G. Lindzey and E. Aronson (eds.),

  The handbook of social psychology, Vol. 3, Reading, Mass:

  Addison-Wesley, 1969
- Veldman, D.J. Fortran programming for the behavioral sciences, New York: Holt, 1967
- Webb, W.B. & Nolan, C.Y. Student, supervisor, and self-ratings of instructional proficiency. <u>Journal of Educational Psychology</u>, 1955, 46, 42-46.



# Appendix A

# THE UNIVERSITY OF TEXAS AT AUSTIN -- COURSE-INSTRUCTOR SURVEY: GENERAL QUESTIONNAIRE

# DIRECTIONS: PLEASE MARK YOUR RESPONSES TO EACH ITEM ON THE SEPARATE ANSWER SHEET

1. My classification is:

A = Graduate B = Senior C = JuniorD = Sophomore E = Freshman

2. My sex is:

A = MaleB = Female

3. My final grade in this course will probably be:

$$A = A$$
  $B = B$   $C = C$   $D = D$   $E = F$ 

4. My overall grade-point average at UT Austin is:

$$A = 3.50 - 4.00$$
  $B = 3.00 - 3.49$   $C = 2.50 - 2.99$   $D = 2.00 - 2.49$   $E = Less than 2.00$ 

5&6. The college or school in which I am enrolled is: (Mark only one response)

7. I took this course to satisfy:

A = Major or minor field requirements

B = Other specific degree requirements C = Elective credits required for degree D = Non-degree requirements (e.g., teacher certification)

E = No requirements at all

Items 8 - 32 all use the same response scale in which:

A = Definitely Yes

B = Yes

C = Uncertain or neutral

D = No

E = Definitely No

Do not mark responses to items which are not relevant to this course.

Please explain or elaborate on your responses in the COMMENTS section of the answer sheet.

The instructor seemed to be sensitive to the feelings and needs of students.

The instructor seemed well-prepared for lecture or discussion. 9.

The instructor showed a scholarly grasp of the course material. 10.

The instructor showed confidence before the class. 11.

12. The instructor paced the course well.

The instructor kept his lectures and class discussions focused on the subject of the course. 13.

The instructor usually seemed to be aware of whether the class was following his presentation with understanding. 14.

The instructor used clear, relevant examples. 15.

16. The instructor's mannerisms or habits reduced the effectiveness of his teaching.

17. The instructor's speech and lecture style contributed to his teaching effectiveness.

The instructor made me feel free to ask questions, disagree, and express my ideas. 18.

The instructor was intellectually stimulating (thought-provoking, or caused me to do additional studying on my own.) 19.

20. The instructor showed a genuine interest in teaching the course.

21. The instructor was generally accessible to students outside of class.

The instructor gave adequate instructions concerning assignments. 22.

The instructor commented informatively on tests and assignments.

- 24. The tests were usually graded and returned promptly.
- 25. I was satisfied with the way the performance of students was evaluated in this course.
- 26. The textbooks were adequate for this course.
- 27. The reference books and materials in the library were adequate for this course.
- 28. I feel that I profited from the out-of-class assignments.
- 29. I feel that I profited from the laboratory (or discussion section) for this course.
- 30. Before the semester began, I thought I would enjoy this course.
- 31. Before the semester began, I thought this course would be of value to me.
- 32. At this point in time, I feel that this course will be (or has already been) of value to me.

For items 33 - 40, choose the appropriate response from those given for each item.

33. The amount of outside preparation required for this course was:

A = Excessive

D = Low

B = High

E = Insignificant

C = About right

34. For each hour of class, the average amount of time I spent on this course outside of class was about:

A = 2 hours or more

D = 1/2 hour

 $B = 1\frac{1}{2}$  hours

E = Less than ½ hour

C = 1 hour

35. Compared with the effort I usually put into a course, my effort in this course was:

A = Well above average

D = Below average

B = Above average

E = Well below average

C = Average

36. I met with the instructor outside of class to discuss the course:

A = Many times

D = Never, because I couldn't find him

B = A few times

E = Never, because I never tried

C = Only ace or twice

37. I was absent from class:

A = Never

D = 5 to 9 times

B = Once or twice

Z = 19 times or more

C = 3 or 4 times

38. Compared with all the instructors I have had, both in high school and in college, this instructor was:

A = One of the best

D = Below average

B = Above average

E = Far below average

C = Average

39. Compared with all the courses I have had, both in high school and in college this course was:

A = One of the best

D = Below average

B = Above average

E = Far below average

C = Average

40. Compared with what I expected to get from this course, I feel I got:

A = Far more than I expected

D = Less than I expected

B = More than I expected

E = Far less than I expected

C = What I expected

PLEASE NOTE THESE SPECIAL INSTRUCTIONS FOR THE COMMENTS SECTION OF THE ANSWER SHEET.

Many instructors have indicated that written comments help them understand better the responses given to the multiple-choice items, and that the written comments frequently contain very helpful and constructive recommendations. Please take the time and effort to:

- 2. Explain or elaborate on your responses to the previous 40 items.
- b. Suggest ways in which the instructor can improve his teaching.
- c. Suggest ways in which the course can be improved.

# Appendix B

# Instructor Self Rating Form

Nam	e:	Courso:	Cours	e Unique No:
ı.	Background Information.	Please fili in the bl - All information wi	ank or put a check ll be kept strictly	by the appropriate confidential.
	1. Sex: (1)Female (2)	Male		
	2. Faculty Rank: (1) Teac		S)Lecturer	
		stant Instructor (		C 42T
	(3) <u> </u>	ructor (	7)Professor	
	(4)Ass1	stant Professor	•	
	3. Age: (1)20-25 (2)_ (6)51-60 (7)_	26-30 (3)31-35 Over 60	(4)36-40 (5	)41-50
	4. Total Years of college-le		ce:	
	5. In your previous ceaching you received formal stude	experience, how many	times (total and	- of course (-) have
	(1) No previous experie	nce (4)3-4 cour	ses (7) 9-10	courses
	(2) 0 courses	(5)5-6 cour	ses (8) <u>11-15</u>	courses
	(3)1-2 courses	(6)7-8 cour	ses (9)nore ti	han 15 courses
	6. Of the courses you have p approximately what propor	cros ara you rece; ve	formal student rat:	d elsewhere, in ings?
	(1) No previous experie	nce (3)about 25%	(5)about 75%	
	(2)None	(4)about 50%	(6)100%	
	can judge the opinions of hit to receiving formal student ualized as a number line unfilmstructor Survey questionnal Definitely	teedoach. For this si ch extends from -2.0 ( fre these numbers ara	tudy, student opinion to +2.0. In terms of assigned as follows	on has been concept- of the Course- s;
	No No	Uncertaio or Neutral	Yes.	Definitely
	4	· · · · · · · · · · · · · · · · · · ·	<u> </u>	••••••
	-2.0 -1.3 -1.0	3 0.0	+.5 +1.0	+1.5 +2.0
	If a class as a whole perceiv (e.g., paced the course well) of the scale (e.g., 1.9). If peced well, the location of on whether the instructor paced .3. Finally, if many student student opinion on the scale The items below were dra- your department for the Fall Fall 1973 students enrolled of -2.0 to +2.0 scale described numerical value of the point opinion of your students. A	of the location of the fine class members "g pinion might be 1.1, the course appropriates felt that the course might be a -1.2. Semester 1973. For a fin the course indicate above. In the blank on the scale which we	erropinions would be generally agreed" the class we sely, the consensus see was not paced well astructor Survey question item estimate to at the left of each of the fact of each to consensus the self of each the select of	be near the +2.0 end not the course was somewhat uncertain of opinion might be li, the location of estionnaire used in the opinion of your is page, using the nitem write the
1.7	1. (example item) The instru	sctor presented the out	iterial coherently.	
<u>.                                    </u>	2. The instructor seemed to	be sensitive to the f	ealings and needs o	f students,
	3. The instructor seemed well			
	4. The instructor showed cor			
	5. The instructor kept his property.			
	6. The instructor usually seprementation with underst	anding.	hether tha class va	s following his
	7. The instructor used clear	•		
<u>.</u>	8. The instructor's speech a	ing lecture style cont	ributed to his teac	hing effectivenese.
<u>.</u>	9. The instructor made me fe	er tree to ask quest!	ons, disagree, and	express my ideas.
<u> </u>	10. The inecructor was intell	eccuarry stimulating	and thought-provoki	.ng.



# Appendix B (continued)

	The instructor	showed genuine	interest in t	eaching the	course.	
12.	The instructor	r was generally	ccessible to	students ou	side of class.	
13.	. The inscructor	commented info	rmatively on t	ests and ass	ignments.	
14	. The tests were	usually graded	and returned	promptly.	•	
15	. Before the sea	ester began. L	thought I woul	d enjoy this	duurse.	
16.	. Betore the sec	mestet began, I	thought this c	ourse would	be of value to	me.
17.	At this point velue to me.	in time, I feel	that this cou	rse vill be	(or has elready	been) or
18.	The instructor	paced the cour	se well.			
19.	. I vas satisfic	d with the way	the performanc	e of studens	3 - 58 evaluated	in this cours
20.	The textbooks	were adequate f	or this course	١•		
<u>2;</u> .	The reference	books and mater	ials in the li	brary were a	dequate for thi	s course.
22.	I feel that I	prosited from t	ne out-of-cles	s assignment		
		profited from t				this course.
		the Students.	tor cue (MO 1	rems peron (	tilize the foll	oving scale.
Ave	below rage	Below Average	Averag	•	Above	One of the
Ave	rage	Average	Averag	•	Above	One of the Best
Ave	1.0 -1.5	Average	Averag	• • · · · · · · · · · · · · · · · · · ·	Above Average +1.0 +1.	One of the Best
-2 1.	L	Average	Averag	+.5	Above Average +1.0 +1. school and in c	One of the Best  5 +2.0 ollege, this
	Compared with course was:  Compared with instructor wae	Average	Averag	+.5 oth in high	Above Average +1.0 +1. school and in c	One of the Best  5 +2.0 ollege, this
	Compared with course was:  Compared with instructor was  tructor Evaluac	Average -1.0 - all the coursee all instructore:	Average 5 0.0 I have hed, b	+.5 oth in high oth in high	Above Average +1.0 +1. school and in c	One of the Best   5 +2.0  ollege, this  ollege, this
	Compared with course was:  Compared with instructor was  Cructor Evaluac  How valuable d teaching?  A. Very valuab	Average  -1.0 - all the coursee all instructore : ion of the Cours o you feel form le improving certainele	Average	+.5 oth in high oth in high Survey Syste	Above Average +1.0 +1. school and in c	One of the Best   5 +2.0  ollege, this  ollege, this

# Appendix C

# Independent Dimensions of the Course-Instructor Survey General Questionnaire

Com	ponent I - Student-Instructor Interactions	(eigenroot=11.13)
	Item Description	Principal Component Loading
1.	Instructor made me feel free to ask questions, disagree, and express my ideas.	.9082
2.	The instructor seemed to be sensitive to the feelings and needs of the students.	he .8462
3.	The instructor usually seemed to be aware whether the class was following his presention with understanding.	
4.	The instructor commented informatively on tests and assignments.	.6965
5.	The instructor was generally accessible to students outside of class.	.6354
6.	The instructor's speech and lecture style contributed to his teaching effectiveness.	.6270
7.	I was satisfied with the way the performand of students was evaluated in this course.	ce .6155
8.	The instructor used clear, relevant example	es6090
9.	The instructor showed genuine interest in teaching the course.	.5900
10.	Compared with all instructors I have had, in high school and in college, this instructors	both ctor .5805
11.	The instructor was intellectually stimulat and thought-provoking.	ing .5212
12.	At this point in time, I feel that this co- will be (or has already been) of value to	urse me5140



# Appendix C(continued)

Com	ponent I - Student-Instructor Interactions (eig	gearoot=11.13)
	Item Description Comp	Principal ponent Loading
13.	The instructor paced the course well.	.4995
14.	I feel that I profited from the out-of-class assignments.	.4250
15.	Compared with all the courses I have had, both in high school and in college, this course was	.4122
	Component II - Student Expectations (eigenro	ot=2.52)
1.	Before the semester began, I thought this course would be of value to me.	.9259
2.	Before the semester began, I thought I would enjoy this course.	.8947
3.	At this point in time, I feel that this cours will be (or has already been) of value to me.	e .4703
	Component III - Instructor Competence (eigenr	oot=1.24)
1.	The instructor showed confidence before the class.	.7817
2.	Compared with all the courses I have had, both in high school and in college, this courwas	se .6971
3.	Compared with all instructors I have had, bot in high school and in college, this instructo was	
4.	The instructor seemed well-prepared for lecture or discussion.	.6697
5.	The instructor was intellectually stimulating	



# Appendix C (continued)

	Item Description Co	Princ: mponent	_
6.	The instructor's speech and lecture style contributed to his teaching effectiveness.	.62	38
7.	The textbooks were adequate for this course.	. 59:	21
8.	The instructor used clear, relevant examples	557	99
9.	I feel that I profited from the out-of-class assignments.	.56	89
10.	At this point in time, I feel that this counwill be (already has been) of value to me.	rse .54	75
11.	The instructor showed genuine interest in teaching the course.	,53	95
12.	The instructor usually seemed to be aware of whether the class was following his presentation with understanding.	<b>,</b> 43	26
·	Component IV - Classroom Organization (eige	nroot=1,	31)
1.	The tests were usu. Lly graded and returned promptly.	.76	44
2.	The instructor kept his lectures and class discussions focused on the subject of the course.	.73	352
3.	The instructor seemed well-prepared for lecture or discussion.	,58	339
4.	The instructor commented informatively on tests and assignments.	<b>,</b> 5:	360
5.	The instructor paced the course well.	.4	771
6.	I was satisfied with the way the performant of students was evaluated in this course.		986



 $\label{eq:Appendix D} \textbf{Background Characteristics of the Subject Sample}$ 

(N = 3	1	8	)
--------	---	---	---

_		
Sex	a. Male b. Female	63% 32%
Faculty Rank	'a. Teaching Assts. b. Instructors c. Asst. Professor d. Tenured Professor	40% 15% 30% 14%
Age	a. 20 - 25 years b. 26 - 30 years c. 31 - 35 years d. over 35 years	18% 35% 27% 21%
Teaching Experience	<ul><li>a. Less than 2 years</li><li>b. 2 - 6 years</li><li>c. More than 6 years</li></ul>	28% 53% 19%
Previous CIR Participation	<ul> <li>a. 0 courses previously rated</li> <li>b. 1-6 courses previously rated</li> <li>c. More than 6 courses previously rated</li> </ul>	27% 40% 33%
Ç. llege	a. Humanities b. Communication c. Social & Behavioral Sciences d. Natural Sciences	44% 10% 24% 22%
Class Size	a. 10-20 students b. 21-30 students c. 31 - 40 students d. 41 - 49 students	40% 30% 19% 11%

\*Percentages within each cell may not sum to 100% due to rounding errors.

